

Air Quality Construction Permit No. 4 (GCP-4)
FORM C –Siting Registration Application Information
[To be attached to GCP-4 Form A - Submittal Form.]

| | | | |
|---|---|------------|---------------------------|
| 1 | Company name: | | Date submittal certified: |
| 2 | Facility name: | GCP-4 No.: | Contact person: |
| 3 | Date that Operations Began: | | |
| 4 | Operating Scenario for specified location (check one): <input type="checkbox"/> Scenario 1 <input type="checkbox"/> Scenario 2 | | |
| 5 | Check one: <input type="checkbox"/> This facility at this location has not been issued a previous air quality construction permit under 20.2.72 NMAC. <input type="checkbox"/> This facility at this location has been issued the following portable source air quality construction permit under 20.2.72 NMAC: Permit No: <input type="checkbox"/> This facility at this location has been issued the following stationary source air quality construction permit under 20.2.72 NMAC: Permit No: <i>Note that submission of a Siting Registration Application for this facility constitutes a request that the Department cancel any stationary source permit previously issued for the facility and replace it with the GCP-4 Registration.</i> | | |

Verification of Applicability

The following questions verify that this facility will meet applicability requirements under GCP-4. If you answer NO to any of the questions numbered 6-15, your facility **does not** qualify for registration under GCP-4. Note that the accuracy of these answers is certified as part of this submittal.

| | | |
|----|---|--|
| 6 | Has this form been submitted to the Department within ten (10) days of beginning operation at the site? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 7 | Does the facility include only equipment allowed under GCP-4, Condition VII of, and does not include any petroleum refinery, chemical manufacturing plant, fire pit, or bulk gasoline terminal or plant? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 8 | Does each piece of equipment listed in this submittal meet the appropriate specifications listed in GCP-4, Condition VII? (This would not include equipment exempted under 20. NMAC 2.72.219.B) | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 9 | Are the total annual emissions, as calculated under GCP-4, Section V.3 , less than or equal to the applicable emissions limits listed in GCP-4, Condition III, for the Scenario under which the facility is registered? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 10 | Are all engines and turbines to be fueled using natural gas, sweet natural gas, liquid petroleum gas or fuel gas, containing less than 0.25 grains H ₂ S/100 dry standard cubic feet of fuel? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 11 | Is the combined total number of engines and turbines less than or equal too four (4)? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 12 | Do the stack heights for all engines and turbines meet the requirements of Condition GCP-4, VI.2 of? | <input type="checkbox"/> Yes <input type="checkbox"/> No |

| | | |
|----|--|--|
| 13 | Is this facility exempt from Air Toxics provisions under 20.2.72 NMAC Condition 400-499? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 14 | Did you submit the Initial Registration application, under which this Siting Registration Application is submitted, not more than two (2) years ago? | <input type="checkbox"/> Yes <input type="checkbox"/> No |

List all equipment in Tables 1 through 10, as appropriate, and reflect each unit on an attached process flow sheet (see below for more information about process flow sheets). Enter emissions sums by facility type in Table 11 (and, if required, Table 12), and total facility-wide annual emissions.

Table 1a: Engine(s) and Turbine(s) [Condition VII Line 1]

| Unit # | SCC # | Manufacturer and model number | Size, Rating or Capacity (include units) | Emissions Control (if applicable) | Portable Permit # (if applic.) | Stack Exit Conditions | | | | |
|--------|-------|-------------------------------|--|-----------------------------------|--------------------------------|-----------------------|----------|-------------|----------|-------------|
| | | | | | | Height | Diameter | Orientation | Velocity | Temperature |
| | | | | | | | | | | |
| | | | | | | | | | | |

Table 1b: Engine(s) and Turbine(s) Emissions [Condition VII Line 1]

| | Unit # | Maximum Operational Emissions | | | | | | | | | | | |
|--|--------|-------------------------------|-----|-----------|-----|-----|-----------|------|-----|------------|-----|-----|-----|
| | | NO _x | | | CO | | | PM10 | | Total HAPs | | VOC | |
| | | PPH | TPY | g/(hp-hr) | PPH | TPY | g/(hp-hr) | PPH | TPY | PPH | TPY | PPH | TPY |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Sum of TPY emissions for all engines and turbines: | | N/A | | | N/A | | | N/A | | N/A | | N/A | |

Required Attachments: The manufacturer's emission specifications for each engine and turbine, in grams per horsepower-hour (g/hp-hr) for both oxides of nitrogen (NO_x) and carbon monoxide (CO); operating limitations such as horsepower or revolutions per minute which limit emissions; stack parameters including the height (plus or minus six (6) inches), diameter, exit orientation, and exit gas velocity and temperature; emissions calculations. List manufacturer of AFR controller for each engine for which the AFR controller not integral to engine.

Table 2: Catalytic Converter(s) Engines or Turbines [Condition VII Line 1]

| Unit # | SCC # | Unit(s) Controlled by this Cat Converter | Manufacturer and Model Number (at time of construction) | Control Efficiency |
|--------|-------|--|---|--------------------|
| | | | | |
| | | | | |
| | | | | |

Required Attachments: Attach method of determining and achieving control efficiency.

Table 3: Glycol Dehydrators [Condition VII Line 3]

| Unit # | Manufacturer and Model # | SCC # | Size, Rating or Capacity | Emissions Control (if applicable) | | | | Maximum Operational Emissions for Uncontrolled Units Only | | | | | |
|---|--------------------------|-------|--------------------------|-----------------------------------|------|--------------------------|--------------|---|-----|------------|-----|-----|-----|
| | | | | Unit # | Type | Manufacturer and Model # | Control Eff. | H2S | | Total HAPs | | VOC | |
| | | | | | | | | PPH | TPY | PPH | TPY | PPH | TPY |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Sum of TPY emissions not ducted to condensers, vapor recovery units, or combustion devices: | | | | | | | | | | N/A | | N/A | |

Required Attachments: The dehydrator list including all input and output data from a Department-approved emissions calculation program; type of glycol; maximum design and actual site glycol pump circulation rates; extended gas analysis of inlet gas, including analyses of H2S, VOCs and HAPs, and throughput.

Table 4: Amine Units [Condition VII Line 4]

| Unit # | Manufacturer and Model # | SCC # | Size, Rating or Capacity | Emissions Control (if applicable) | | | | Maximum Operational Emissions for Uncontrolled Amine Units Only | | | | | |
|---|--------------------------|-------|--------------------------|-----------------------------------|------|--------------------------|--------------|---|-----|------------|-----|-----|-----|
| | | | | Unit # | Type | Manufacturer and Model # | Control Eff. | H2S | | Total HAPs | | VOC | |
| | | | | | | | | PPH | TPY | PPH | TPY | PPH | TPY |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Sum of TPY emissions not ducted to flares or thermal oxidizers: | | | | | | | | N/A | | N/A | | N/A | |

Required Attachments: An amine unit list including all input and output data from a Department-approved emissions calculation procedure, including manufacturer and model number; type of amine used; maximum design and actual site amine pump circulation rates (in gallons per minute); extended gas analysis of inlet gas, including analyses of H₂S, VOCs and HAPs; throughput (in standard cubic feet per day).

Table 5: Flares [Condition VII Line 5]

| Unit # | SCC # | Height (feet) | Means of Ignition | Max Operational throughput | Maximum Operational Emissions | | | | | | | | | | | |
|--------------------------------------|-------|---------------|-------------------|----------------------------|-------------------------------|-----|-----|-----|-----------------|-----|------------------|-----|------------|-----|-----|-----|
| | | | | | NO _x | | CO | | SO ₂ | | H ₂ S | | Total HAPs | | VOC | |
| | | | | | PPH | TPY | PPH | TPY | PPH | TPY | PPH | TPY | PPH | TPY | PPH | TPY |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| Sum of TPY Emissions for all Flares: | | | | | N/A | | N/A | | N/A | | N/A | | N/A | | N/A | |

Required Attachments: Description of the means of ensuring a continuous ignition source; means of calculating emissions of NO_x, CO, SO₂, H₂S, HAPs, and VOC from throughput; maximum operational throughput (in million standard cubic feet) per year, to be calculated as a twelve (12)-month rolling total.

Table 6: Thermal Oxidizers [Condition VII Line 6]

| Unit # | SCC # | Units Controlled by this | Minimum Operational Temperature | Maximum Operational Emissions | | | | | | | | | | | |
|-----------------------|-------|--------------------------|---------------------------------|-------------------------------|-----|-----|-----|-----------------|-----|------------------|-----|------------|-----|-----|-----|
| | | | | NO _x | | CO | | SO ₂ | | H ₂ S | | Total HAPs | | VOC | |
| | | | | PPH | TPY | PPH | TPY | PPH | TPY | PPH | TPY | PPH | TPY | PPH | TPY |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Sum of TPY Emissions: | | | | N/A | | N/A | | N/A | | N/A | | N/A | | N/A | |

Required Attachments: Means of determining minimum operational temperature (to achieve 98% control efficiency), emissions calculations.

Table 7: Other Combustion Units [Condition VII Lines 7 and 12]
(Including Reboilers, Separators, and Heaters, and Combustion Units That Use Liquid Fuel)

| Unit # | SCC # | Unit Description (incl. BTU rating) | Fuel Type (if liquid, max usage) | Maximum Operational Emissions | | | | | | | | | | | |
|-----------------------|-------|-------------------------------------|----------------------------------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|------------|-----|-----|-----|
| | | | | NOx | | CO | | SO2 | | H2S | | Total HAPs | | VOC | |
| | | | | PPH | TPY | PPH | TPY | PPH | TPY | PPH | TPY | PPH | TPY | PPH | TPY |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Sum of TPY Emissions: | | | | N/A | | N/A | | N/A | | N/A | | N/A | | N/A | |

Required Attachments: Fuel specification sheets, emissions calculations.

Table 8: Condensers [Condition VII Line 8]

| Unit # | SCC # | Units Controlled by this | Maximum Operational Emissions | | | | | |
|-----------------------|-------|--------------------------|-------------------------------|-----|------------|-----|-----|-----|
| | | | H2S | | Total HAPs | | VOC | |
| | | | PPH | TPY | PPH | TPY | PPH | TPY |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Sum of TPY Emissions: | | | N/A | | N/A | | N/A | |

Required Attachments: The Inputs and outputs for Department-approved emissions calculation procedure.

Table 9: Storage Tanks [Condition VII Line 9]

| Unit # | SCC # | Manufacturer, model number, date of manufacture | Liquid Stored | Capacity | Max. Annual Through-put | Control (if applicable) | Maximum Operational Emissions (including flashing losses) | |
|--|-------|---|---------------|----------|-------------------------|-------------------------|---|-----------|
| | | | | | | | Total HAPs (TPY) | VOC (TPY) |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Sum of TPY emissions (after control, if applicable): | | | | | | | | |

Required Attachments: All input and output data from a Department-approved emissions calculation program, and either emissions calculations of flashing losses (including upstream vessel pressure and API gravity of liquid) or documentation showing that there are no flashing losses from a particular tank.

Table 10: Truck Loading Operations [Condition VII Line 13]

| Unit # | SCC # | Materials handled | Max annual Throughput | Maximum Operational Emissions | |
|-----------------------|-------|-------------------|-----------------------|-------------------------------|-----------|
| | | | | Total HAPs (TPY) | VOC (TPY) |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Sum of TPY Emissions: | | | | | |

Required Attachments: A description of the truck loading operations, emissions calculations.

Table 11: Sum of Total Annual Emissions (TPY) at the Facility [Condition IV Line 22]

Fill in the Sum of TPY emissions from each of the above tables and calculate Facility totals. See Condition III.

| Sum From Table # | Equipment Type | NO _x | CO | PM ₁₀ | SO ₂ | H ₂ S | Total HAPs | VOC |
|---------------------|--------------------------|-----------------|-----|------------------|-----------------|------------------|---------------|-----|
| 1 | Engines and Turbines | | | | N/A | N/A | | |
| 3 | Glycol Dehydrators | N/A | N/A | N/A | N/A | | | |
| 4 | Amine Units | N/A | N/A | N/A | N/A | N/A | | |
| 5 | Flares | | | N/A | | | | |
| 6 | Thermal Oxidizers | | | | | N/A | | |
| 7 | Other Combustion Units | | | N/A | | | | |
| 8 | Condensers | N/A | N/A | N/A | N/A | | | |
| 9 | Storage Tanks | N/A | N/A | N/A | N/A | N/A | | |
| 10 | Truck Loading Operations | N/A | N/A | N/A | N/A | N/A | | |
| | Total: | | | | | | | |

Table 12: Sum of Total Annual Emissions (TPY) of Hazardous Air Pollutants at the Facility [Condition IV Line 22]

If Facility Total HAPs is greater than or equal to 8 TPY, complete the following and attach calculations:

| Individual HAP Emitted | Maximum Facility Emissions (TPY) |
|------------------------|----------------------------------|
| | |
| | |
| | |
| | |
| Total: | |

Additional Required Attachments

In addition to the Required Attachments listed above for specific equipment types, the following Attachments are required for this submittal to be complete. Please label each accordingly.

Attachment A A process flow sheet and/or block diagram indicating the individual equipment, all emission points and types of control applied to those points. Numbering system should cross reference with Unit Numbers listed in Tables 1 through 11. In addition, Vapor Recovery Units [Condition VII Line 10] and Cryogenic Units [Condition VII Line 11] shall be reflected in the process flow sheet/diagram [Condition IV.21].

Attachment B Emissions calculations and supporting documentation.

Attachment C *A discussion demonstrating compliance with each applicable state & federal regulation. If there is a state or federal regulation for your facility's source category that does not apply to your facility, explain why. [Condition IV Line 21: NMAC, NSPS, NESHAP and MACT applicability determinations and list of requirements that apply to each unit.]*

Attachment D Application shall also include all information, if any, required under any applicable NMAC, NSPS, NESHAP or MACT for Ancillary Equipment not Included in VII.1-13 [Condition VII Line 14].

Attachment E A preliminary operational plan defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown.

Attachment F A list of sources and activities at the facility that are exempted under 20 NMAC 2.72.202.B [Condition VII Line 15]. [Sources and activities exempted under Section 202.A are not included in the application.]

Attachment G Other relevant information. Use this attachment to clarify any part in the application that you think needs explaining. Reference the table, line, column, and/or field.

Attachment H Verification that this Siting Registration Submittal has been sent to the Department District of Field Office nearest to the facility location. [Condition IV Line 20]